# STATEMENT OF WORK (SOW) for the Inspection and Repair Only As Necessary (IROAN) of the AN/TPS-63B RADAR SET NSN 5840-01-355-0092

SOW-01-844-2-07736C-2/1

- 1. This SOW identifies the work effort that shall be performed by the Contractor to IROAN the AN/TPS-63B Radar Set, NSN 5840-01-355-0092, part number 3D54669G01, CAGE 97942.
- 2. The attached manuscript has been reviewed and is concurred upon by the following signers:

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# STATEMENT OF WORK (SOW) for the Inspection and Repair Only As Necessary (IROAN) of the AN/TPS-63B RADAR SET NSN 5840-01-355-0092

1.0 <u>Scope</u>. This SOW establishes general and specific requirements to be followed by the Contractor to IROAN the AN/TPS-63B Radar Set (hereafter referred to as "Radar Set"), NSN 5840-01-355-0092, part number 3D54669G01, CAGE 97942. This document contains requirements to restore the Radar Set to Condition Code "A." Condition Code "A" is defined as "serviceable/issuable without qualification; new, used, repaired or reconditioned material that is serviceable and issuable to all customers without limitation or restriction, including material with more than 6 months shelf-life remaining."

## 1.1 Background Information.

- 1.1.1 Contractor: For the purposes of this SOW, Contractor is defined as a commercial or Government entity.
- 1.1.2 IROAN is defined as "That maintenance technique which determines the minimum repairs necessary to restore equipment components or assemblies to prescribed maintenance serviceability standards by utilizing all available diagnostic equipment and test procedures in order to minimize disassembly and parts replacement."
- 1.1.3 Marginal quality: Deteriorated or damaged parts that are reasonably anticipated to fail thereby significantly reducing the expected reliability of an assembly/equipment. An expanded definition and associated requirements for replacement of parts/components adjudged to be of marginal quality is contained in MIL-STD-2110 (EC). Specific requirements of this SOW along with the general requirements as contained in MIL-STD-2110 (EC) shall be used to identify and necessitate the replacement of marginal quality items.

#### 2.0 Applicable Documents

The following documents form a part of this SOW to the extent specified. Unless otherwise specified, the issues of these documents are those listed in the Department of Defense Index of Specifications and Standards (DODISS) and Supplements thereto which are in effect on the date of solicitation. In the event of conflict between the documents referenced herein and the contents of this SOW, the contents of this SOW shall be the superseding requirement. Any remaining conflicts shall be resolved at the discretion of the Weapon System Manager (WSM): e-mail address- MbMatcom844-2@matcom.usmc.mil, mailing address- Commander, Attn: (Code 844-2), Marine Corps Systems Command, 814 Radford Boulevard Suite 20343, Albany, GA 31704-0343, telephone (912) 439-6553, DSN 567-6553.

## 2.1 Military Specifications

MIL-A-8625 Anodic Coatings for Aluminum and Aluminum Alloys MIL-C-5541 Chemical Conversion Coatings on Aluminum and

Aluminum Alloys

## 2.2 Military Standards

MIL-STD-129 DoD Standard Practice for Military Marking
MIL-STD-2073-IC DoD Standard Practice for Military Packaging

MIL-STD-2110 (EC) Restoration, Overhaul, and Repair of Electronic Equipment

## Military Standards (For Reference Only)

MIL-STD-973 Configuration Management

#### 2.3 Other Government Documents and Publications

SL3-07736C	Components List, Radar Set AN/TPS-63B
TI-4400-15/1	Packaging, Handling, Storage, and Transportation of
	Electrostatic Discharge Sensitive Items
TM-07736C-14/1-1	System, Radar Set AN/TPS-63B
TM-07736C-14/1-2	System Technical Description, Radar Set AN/TPS-63B
TM-07736C-14/3	Operation Instructions, Radar Set AN/TPS-63B
TM-07736C-14/14	Maintenance Standards, Radar Set AN/TPS-63B
TM-4750-15/1	Painting and Registration Marking of Marine Corps
	Combat and Tactical Equipment
TM-4750-15/2-8	Painting and Registration Marking of Marine Corps
	Combat and Tactical Equipment (contains patterns)
3D54669	Modification Drawing, Radar Set AN/TPS-63B
PL3D54669	Parts List, Modification Kit, Radar Set AN/TPS-63B
ELEX-R-104B	System Specifications for the AN/TPS-63B

#### 2.4 Industry Standards

ANSI/EIA 625 Requirements for Handling Electrostatic-Discharge

Sensitive (ESDS) Devices

ANSI/ISO/ASQC Quality Systems - Model for Quality Assurance in

Q9002-1994 Production, Installation, and Servicing

Copies of military standards and specifications are available from the DOD Single Stock Point, Defense Automation Production Service Philadelphia, Building 4D, 700 Robbins Avenue, Philadelphia, PA 19111-5094, Telephone (215) 697- 2179 or DSN 442-2179, or <a href="http://dodssp.daps.mil">http://dodssp.daps.mil</a>. Copies of other government publications required by contractors in connection with specific SOW requirements shall be obtained through the Contracting Officer:

Commander, Attn: Contracting Officer (Code 891), Marine Corps Logistics Base, 814 Radford Blvd., Albany, GA 31704-1128, commercial telephone number (912) 439-6761 or DSN 567-6761. Copies of engineering drawings shall be obtained from: Life Cycle Management Center, Attn (Code 825-3), 814 Radford Blvd Suite 20320, Albany GA 31704-0320, commercial telephone number (912) 439-6410 or DSN 567-6410.

## 3.0 Requirements

### 3.1 General Requirements

This SOW establishes uniform standards and procedures as applicable to the entire IROAN process (to include, an initial evaluation of the equipment's condition, maintenance procedures, selection and use of parts/materials, identification/marking of the equipment, and preservation/packing for shipment). Although this SOW along with the referenced documents provide extensive information relative to the IROAN, the information and guidance is limited to establishing only the minimum requirements essential to perform the IROAN process to restore the Radar Set to Condition Code "A".

The Contractor shall be responsible for all parts, materials, labor, facilities, tools, and test equipment necessary to inspect and repair only as necessary the equipment in accordance with the references and this SOW.

Upon completion, the Contractor shall be responsible for informing the WSM that the Radar Set IROAN has been completed and coordinating shipment of the Radar Set to the receiving unit.

The Contractor shall budget for the required temporary additional duty (TAD) funding as part of the IROAN process and provide technical service personnel (actual number to be determined by the Contractor) to the receiving unit to perform joint acceptance testing.

#### 3.2 Detailed Tasks

- 3.2.1 Pre-Induction LTI: Upon receipt of the Radar Set, Contractor technical personnel shall perform a Pre-Induction Limited Technical Inspection (LTI) on the Radar Set scheduled for IROAN utilizing SL3-07736C TM-07736C-14/1-1 and TM-07736C-14/3 for inventorying and determining operational status of the equipment. The LTI shall identify any shortages, long lead-time material requirements, and the overall condition of the Radar Set to be inducted for IROAN. The WSM shall be informed of any equipment shortages in order to coordinate resolution actions. Identification of required long lead-time materials and the overall condition are envisioned to assist IROAN management personnel in the reduction of overall IROAN processing time. Furthermore, the LTI shall include identification of any transportation related damages incurred in-transit. In the event of any transportation related damage(s), the cognizant Transportation Management Office shall be notified, in writing, within 5 working days.
- 3.2.2 Induction for IROAN: Work shall commence within 5 days of receipt of the Radar Set at the Contractor's repair facility. TM-07736C-14/1-1, TM-07736C-14/1-2, 3D54669,

- PL3D54669, and ELEX-R-104B (in particular) should be referenced for informational purposes and to ensure compliance with established mandatory requirements
- 3.2.3 Aluminum and aluminum alloy hardware shall be treated, as required, in accordance with MIL-A-8625 or MIL-C-5441 (as applicable) to provide protection from corrosion/oxidation.
- 3.2.4 All seals/gaskets and bearings/bearing assemblies within the gearbox and pedestal assemblies shall be replaced.
- 3.2.5 Proper pressure seal shall be verified at all fittings in the air and coolant systems. The compressor deck and the coolant pump system shall be inspected and rebuilt if of marginal quality. The coolant reservoir shall be filled with a mixture of 50% distilled water and 50% ethylene glycol prior to shipping.
- 3.2.6 All junctures of the RF transmission line system shall be checked for internal arching damage and all o-rings replaced.
- 3.2.7 Shelter skids shall be inspected for wear and damage, and repaired/replaced as necessary.
- 3.2.8 Installation of all approved modification instructions shall be verified. Any modifications not previously applied shall be incorporated/installed. Additionally, the O<sub>2</sub> Power Supply Modification shall be installed and its operation verified.
- 3.2.9 Unless otherwise specified by the WSM (prior to induction for IROAN), the Radar Set shall be painted with chemical agent resistant coating (CARC) utilizing the applicable green camouflage patterns in accordance with TM-4750-15/1 and TM-4750-15/2-8.
- 3.2.10 Following IROAN of the Radar Set, the Contractor shall conduct a full system operational test in accordance with TM-07736C-14/14. Also required are testing of the IFF system in conjunction with the AN/UPX-27 and AN/UPA-60 (with the exception of Mode 4) and verification/validation of output data utilizing the Portable Autonomous Reports Collection System (PARCS 2000R).
- 3.3 Packaging, Handling, Storage, and Transportation (PHS&T)
- 3.3.1 Upon successful completion of final testing and certification of condition code "A" status, the Contractor shall be responsible for preservation, packaging, and coordinating for shipment of items to be delivered under the terms of this statement of work. All items shall be level B packed in accordance with the requirements of MIL-STD-2073-1C, Appendix A, Table A.VI., Electronic Equipment. Since any overseas shipments must be via priority Military Airlift Command (MAC) and all shipments will result in immediate use, no level "A" preservation, packing, & packaging requirements exist.
- 3.3.2 Marking shall be in accordance with MIL-STD-129.

3.3.3 The Marine Corps will provide the Contractor with the shipping address(es) for delivery of the Radar Set(s). The Contractor shall be responsible for arranging for shipment to the predesignated site(s). The Marine Corps will be responsible for transportation costs associated with shipping the subject equipment to and from the Contractor. (Note: The Contractor shall ensure that domestic shipment is via air-ride truck and overseas shipment is by priority air shipment via Military Airlift Command.)

### 3.4 Joint Acceptance Testing

The Contractor shall coordinate with the receiving unit; equipment receipt, emplacement, assembly, and joint acceptance testing. Joint acceptance testing shall include, a joint Limited Technical Inspection. Any portion(s) of the full system operational testing identified in paragraph 3.2.10 (preceding) shall be performed at the receiving unit as part of the joint limited technical inspection, including redundant testing previously performed prior to shipment.

# 3.5 Configuration Management

The Contractor shall apply configuration control to established configuration items. Deviations from this established baseline configuration shall not be allowed without the written approval of the WSM. All permanent changes to the form, fit or function of the baseline shall be by Engineering Change Proposal. MIL-STD-973 (paragraph 5.4.2 and Appendix D) may be used as a guide. If necessary to temporarily depart from the authorized configuration baseline, the contractor shall prepare and submit a Request For Deviation/Request For Waiver using MIL-STD-973 (paragraphs 5.4.3 and 5.4.4 and Appendix E) for guidance.

#### 3.6 Government Furnished Equipment (GFE)/Government Furnished Materiel (GFM)

The Management Control Activity (MCA/Code 827-2) will coordinate Government Furnished Equipment/Government Furnished Materiel (GFE/GFM) requests and maintain a central control system on all government owned assets in the contractor's possession. The MCA will forward a GFE/GFM Accountability Agreement to the contractor for signature to establish a chain of custody and identify property responsibilities for Marine Corps assets. The MCA, in conjunction with the WSM, reserve the right to deny any requests for GFE/GFM. Under no circumstances shall denial of such requests form a basis for either work stoppages or delays in delivery.

#### 3.7 ELECTROMAGNETIC ENVIRONMENTAL EFFECTS (E3) PROCEDURES

The Contractor shall plan for and use proper E3 control procedures in the IROAN process in conjunction with TI-4400-15/1 and ANSI/EIA 625.

## 3.8 Quality Assurance Provisions

The Contractor shall provide and maintain a Quality System that, as a minimum, adheres to the requirements of ANSI/ISO/ASQC Q9002-1994, Quality Systems - Model for Quality Assurance in Production, Installation, and Servicing.

## 4.0 REPORTS

- 4.1 The Contractor shall develop a Test Data Report (TDR) that portrays all test requirements/specifications (as collectively contained in the engineering drawings and technical manuals relative to the Radar Set, primarily TM-07736C-14/14), referencing acceptable parameters, specific results obtained during the final diagnostic/integration testing, and general remarks. Additionally, the TDR shall reference this SOW, the NSN, part number, and serial number of the Radar Set. Upon request (within 30 calendar days after completion of testing), a copy of the TDR shall be submitted electronically (preferred), via regular mail, or facsimile, to the WSM. Electronic address is: "MbMatcom844-2@matcom.usmc.mil". Mailing address is: Commander, Attn: (Code 844-2), Marine Corps Systems Command, 814 Radford Boulevard Suite 20343, Albany, GA 31704-0343. Facsimiles may be sent to commercial (912) 439-5498 or DSN 567-5498, attention Weapons System Manager, Code 844-2.
- 4.2 The Contractor shall provide a copy (either hard copy or electronic submittal is acceptable) of the Pre-Induction LTI to the WSM within 15 calendar days after completion of the inspection. The LTI (Contractor format) shall consist of the TDR and extract of SL3-07736C (as applicable to Supply System Responsibility items of the Radar Set). Electronic address is: "MbMatcom844-2@matcom.usmc.mil". Mailing address is: Commander, Attn: (Code 844-2), Marine Corps Systems Command, 814 Radford Boulevard Suite 20343, Albany, GA 31704-0343. Facsimiles may be sent to commercial (912) 439-5498 or DSN 567-5498, attention Weapons System Manager, Code 844-2.
- 4.3 The Contractor shall provide a hard copy (with the signature of the unit's Commanding Officer or his designated representative) of the Joint Acceptance LTI to the WSM within 15 calendar days after completion of the inspection. The Joint Acceptance LTI shall be similar to the Pre-Induction LTI, with additional provisions for the signature and identifying information of the unit's authorized acceptance representative. Mailing address is: Commander, Attn: (Code 844-2), Marine Corps Systems Command, 814 Radford Boulevard Suite 20343, Albany, GA 31704-0343. The unit will retain a copy of the Joint Acceptance LTI (with original signatures) in its files for the Radar Set. Electronic copies of this report are not acceptable.

## CONTRACT DATA REQUIREMENTS LIST

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